## **AMENDMENTS**

## Please amend the following claims to read as follows:

2. (Twice Amended) A method of achieving an effect in a patient comprising administering an effective amount of a vitamin D compound which is a 24-hydroxyvitamin D compound wherein the effect is treating or preventing bone loss or bone mineral content, hyperparathyroidism, hyperproliferation, or modulating the immune or inflammatory response, and wherein said 24-hydroxyvitamin D is a compound of formula (I):

wherein Z represents a saturated or unsaturated, substituted or unsubstituted, straight-chain or branched  $C_4$  -  $C_{18}$  hydrocarbon group in which the C-24 or equivalent position is hydroxylated; Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded; and X is hydrogen, lower alkyl or lower fluoroalkyl.

3. (Twice Amended) A method of achieving an effect in a patient comprising administering an effective amount of a vitamin D compound which is a 24-hydroxyprevitamin D, wherein the effect is treating or preventing bone loss or bone mineral content, hyperparathyroidism, hyperproliferation, or modulating the immune and inflammatory responses, wherein said 24-hydroxyprevitamin D is a compound of formula (III):

QH X Z (III)

(1)

wherein Z represents a saturated or unsaturated, substituted or unsubstituted, straight-chain or branched  $C_4$  -  $C_{18}$  hydrocarbon group in which the C-24 or equivalent position is hydroxylated; Y is a methyl group or hydrogen; and X is hydrogen, lower alkyl or lower fluoroalkyl.

4. (Three Times Amended) The method of claim 14 wherein said 24-hydroxyvitamin D is a compound of formula (I):

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wherein Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded; and X is hydrogen, lower alkyl or lower fluoroalkyl; and Z is a side chain of formula (IIA):

$$R^3$$
 $R^5$ 
 $R^5$ 
 $R^6$ 
 $R^4$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^3$ 
 $R^3$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^3$ 
 $R^3$ 

wherein a dotted line along the side chain represents an optional additional C-C bond and m is 0 or 1; R<sup>1</sup> and R<sup>2</sup> are independently lower alkyl, lower fluoroalkyl, lower alkenyl, lower fluoroalkenyl, lower cycloalkyl or, taken together with the carbon to which they are bonded, form a C<sub>3</sub>-C<sub>8</sub> cyclohydrocarbon ring; R<sup>3</sup> is hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; R<sup>4</sup> is lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and R<sup>5</sup> and R<sup>6</sup> are each hydrogen or taken together form a double bond between C-22 and C-23.

5. (Three times Amended) The method of claim 14 wherein said 24-hydroxyvitamin D is a compound of formula (I):

wherein Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded; and X is hydrogen, lower alkyl or lower fluoroalkyl; and Z is a side chain of formula (IIB):

$$R^3$$
 $R^5$ 
 $R^6$ 
 $R^1$ 
(IIB)

wit.

wherein  $R^5$  and  $R^6$  are each hydrogen or taken together form a double bond between C-22 and C-23,  $R^3$  is hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl;  $R^4$  is lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and  $R^1$  and  $R^2$  are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl, lower fluoroalkenyl, lower cycloalkyl or taken together with the carbon to which they are bonded form a  $C_3$ - $C_8$  cyclocarbon ring.

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13. (Twice Amended) A method of achieving an effect in a patient comprising administering an effective amount of a vitamin D compound which is a 24-hydroxyprevitamin D wherein the effect is increasing or maintaining bone mass or bone mineral content, lowering or maintaining lowered parathyroid hormone level, inhibiting hyperproliferative effects, inducing or enhancing cell differentiation, modulating immune response, or modulating inflammatory response, wherein said 24-hydroxyprevitamin D is a compound of formula (III):

wherein Z represents a saturated or unsaturated, substituted or unsubstituted, straight-chain or branched  $C_4$  -  $C_{18}$  hydrocarbon group in which the C-24 or equivalent position is hydroxylated; Y is a methyl group or hydrogen; and X is hydrogen, lower alkyl or lower fluoroalkyl.

19. (Once Amended) A 24-hydroxyvitamin D compound which is a compound of formula (I):

wherein Z represents a saturated or unsaturated, substituted or unsubstituted, straight-chain or branched  $C_4$  -  $C_{18}$  hydrocarbon group in which the C-24 or equivalent position is hydroxylated; Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded provided that the compound of formula (I) is not 24-hydroxyvitamin  $D_2$ ; and X is hydrogen, lower alkyl or lower fluoroalkyl provided that the compound of formula (I) is not 24-hydroxyvitamin  $D_2$ .

36. (Twice Amended) The composition of claim 15, wherein said 24-hydroxyvitamin D is a vitamin  $D_2$  compound of formula (I):

wherein Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded; and X is hydrogen, lower alkyl or lower fluoroalkyl; and wherein Z is a sidechain of formula (IIB):

$$R^3$$
 $R^5$ 
 $R^6$ 
 $R^1$ 
(IIB)

wherein R<sup>5</sup> and R<sup>6</sup> are each hydrogen or taken together form a double bond between C-22 and C-23, R<sup>3</sup> is hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; R<sup>4</sup> is lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and wherein R<sup>1</sup> is a methyl group, and wherein R<sup>2</sup> is a methyl group.

37. (Twice Amended) The tablet of claim 25, wherein the vitamin D compound is a vitamin  $D_2$  compound of formula (I):

wherein Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded; and X is hydrogen; and wherein Z is a sidechain of formula (IIB):

$$R^3$$
 $R^5$ 
 $R^6$ 
 $R^1$ 
(IIB)

c, o

wherein  $R^5$  and  $R^6$  are each hydrogen or taken together form a double bond between C-22 and C-23,  $R^3$  is hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl;  $R^4$  is lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and wherein  $R^1$  is a methyl group, and wherein  $R^2$  is a methyl group.

## Please add the following claims

- 38. The method of claim 2, wherein the effect is treating or preventing bone loss.
- 39. The method of claim 2, wherein the effect is treating or preventing hyperparathyroidism.
- 40. The method of claim 2, wherein the effect is treating or preventing hyperproliferation.
- The method of claim 2, wherein the effect is modulating an immune response.
- 42. The method of claim 2, wherein the effect is modulating an inflammatory response.
- 43. The method of claim 2, wherein the vitamin D compound is 24-hydroxy-19-nor-vitamin D.
- 44. The method of claim 2, wherein the vitamin D compound is 24-hydroxyvitamin D<sub>2</sub>.
- 45. The method of claim 3, wherein the effect is treating or preventing bone loss.
- 46. The method of claim 3, wherein the effect is treating or preventing hyperparathyroidism.
- 47. The method of claim 3, wherein the effect is treating or preventing hyperproliferation.
- 48. The method of claim 3, wherein the effect is modulating an immune response.
- 49. The method of claim 3, wherein the effect is modulating an inflammatory response.
- 50. The method of claim 3, wherein the vitamin D compound is 24-hydroxy-19-nor-vitamin D.
- 51. The method of claim 3, wherein the vitamin D compound is 24-hydroxyvitamin D<sub>2</sub>.

- 52. The method of claim 11 wherein the effect is increasing or maintaining bone mass.
- 53. The method of claim 11 wherein the effect is increasing or maintaining bone mineral content.
- 54. The method of claim 11 wherein the effect is lowering or maintaining lowered parathyroid hormone level.
- 55. The method of claim 11 wherein the effect is inhibiting hyperproliferative effects.
- 56. The method of claim 11 wherein the effect is inducing or enhancing cell differentiation.
- 57. The method of claim 11 wherein the effect is modulating an inflammatory response.
- 58. The method of claim 11, wherein the vitamin D compound is 24-hydroxy-19-nor-vitamin D.
- 59. The method of claim 11, wherein the vitamin D compound is 24-hydroxyvitamin D<sub>2</sub>.
- 60. The method of claim 13 wherein the effect is increasing or maintaining bone mass.
- 61. The method of claim 13 wherein the effect is increasing or maintaining bone mineral content.
- 62. The method of claim 13 wherein the effect is lowering or maintaining lowered parathyroid hormone level.
- 63. The method of claim 13 wherein the effect is inhibiting hyperproliferative effects.
- 64. The method of claim 13 wherein the effect is inducing or enhancing cell differentiation.
- 65. The method of claim 13 wherein the effect is modulating an immune response.

- 66. The method of claim 13 wherein the effect is modulating an inflammatory response.
- 67. The method of claim 13, wherein the vitamin D compound is 24-hydroxy-19-nor-vitamin D.
- 68. The method of claim 13, wherein the vitamin D compound is 24-hydroxyvitamin D<sub>2</sub>.
- 69. The method of claim 14 wherein the method of treatment alleviates the pathological effects of osteoporosis.
- 70. The method of claim 14 wherein the method of treatment alleviates the pathological effects of hyperparathyroidism.
- 71. The method of claim 14 wherein the method of treatment alleviates the pathological effects of psoriasis.
- 72. The method of claim 14 wherein the method of treatment alleviates the pathological effects of skin cancer.
- 73. The method of claim 14 wherein the method of treatment alleviates the pathological effects of breast cancer.
- 74. The method of claim 14 wherein the method of treatment alleviates the pathological effects of colon cancer.
- 75. The method of claim 14 wherein the method of treatment alleviates the pathological effects of prostate cancer.
- 76. The method of claim 14 wherein the method of treatment alleviates the pathological effects of prostatic hyperplasia.
- 77. The method of claim 14 wherein the method of treatment alleviates the pathological effects of inflammatory response imbalance.

- 78. The method of claim 14 wherein the vitamin D compound is administered to the human in an amount sufficient to increase or maintain bone mass.
- 79. The method of claim 14 wherein the vitamin D compound is administered to the human in an amount sufficient to increase or maintain bone mineral content.
- 80. The method of claim 14 wherein the vitamin D compound is administered to the human in an amount sufficient to lower or maintain lowered parathyroid hormone level.
- 81. The method of claim 14 wherein the vitamin D compound is administered to the human in an amount sufficient to inhibit hyperproliferative effects.
- 82. The method of claim 14 wherein the vitamin D compound is administered to the human in an amount sufficient to induce cell differentiation.
- 83. The method of claim 14 wherein the vitamin D compound is administered to the human in an amount sufficient to enhance cell differentiation.
- 84. The method of claim 14 wherein the vitamin D compound is administered to the human in an amount sufficient to modulate inflammatory response in the human.
- 85. The method of claim 14, wherein the vitamin D compound is 24-hydroxy-19-nor-vitamin D.
- 86. The method of claim 14, wherein the vitamin D compound is 24-hydroxyvitamin D<sub>2</sub>.